



# UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,502	12/11/2001	Kerry Champion	STELP002	6525
22434	7590	10/18/2005	EXAMINER	
BEYER WEAVER & THOMAS LLP			PARTHASARATHY, PRAMILA	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
2136				
DATE MAILED: 10/18/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/015,502	CHAMPION, KERRY
	Examiner	Art Unit
	Pramila Parthasarathy	2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 27 July 2005.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-68 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) \_\_\_\_\_ is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_

**DETAILED ACTION**

1. This action is in response to the communication filed on 07/27/2005. Claim 4 has been amended to now depend on Claim 3. No Claims were cancelled. Claims 1 – 68 are currently being considered.
  
2. Applicant improperly states that cited prior art Atwal et al. U.S. Publication Number 2003/0061401 has the filing date of September 23, 2003. Cited prior art U. S. Publication Number is 2003/0061404 and filing date September 23, 2002. Examiner would like to remind the applicant that Atwal et al. (U. S. Publication Number 2003/0061404) claims priority date of September 21, 2001.

***Response to Arguments***

3. Applicant's arguments filed July 27, 2005 have been fully considered but they are not persuasive.
  
4. Applicant's argument regarding the filing date of both prior art references being after the instant application is correct but both applications claim priority with provisional applications which are before the filing date of the instant application. See MPEP § 201.11 for the conditions for receiving the benefit of the filing date of the prior application

5. Regarding claims 1 – 3, 5, 13 and 23 – 68, Applicant argues that the provisional application 60/324,191 do not teach “determining whether a security rule is associated with a SOAP message, wherein the security rule is associated with a security policy for exchanging messages between a client program and a server program”, “a security rule that describes a mapping between one or more keys respectively used by a client and a server program” and “mapping one or more security identifiers which are recognized by a client program to one or more security identifiers which are recognized by the server program”. These arguments are not found persuasive.

60/324,191 discloses “The communication between client and service over the SOAP protocol, receiving a SOAP message from a client, the web services infrastructure is able to check authentication, authorization to determine if the method should be allowed to proceed to the service (determining whether at least one security rule is associated with a security policy for exchanging messages between a client program and a server program and a security rule that describes a mapping between one or more keys respectively used by a client and a server program”), see 60/324,191 pages 6 line 5 – Page 10 line 6,” and web services infrastructure is able to intercept and modify any SOAP messages between client and server, i.e., able to insert parameters (map)that the web service provides for all method calls in that service (mapping one or more security identifiers which are recognized by a client program to one or more security identifiers which are recognized by the server program), see 60/324,191 page 10 lines 7 – 22.

6. Regarding claims 4, 6 – 24, 16 – 21, 26 and 36, Applicant argues that “mapping one or more encryption keys, decryption keys, signing keys, or keys used to verify one or more signatures between a client program and a server program” are not supported by the provisional application 60/329,796 does not teach or suggest this features. These arguments are not found persuasive.

60/329,796 discloses defining multiple credentials and each credential tag identifying the type of contained data (the specification defines tags to use for encoding x.509 certificates and Kerberos tickets) as well as encrypting data (“mapping one or more encryption keys, decryption keys, signing keys, or keys used to verify one or more signatures between a client program and a server program” see 60/329,796 pages 25 – 33.

Therefore, the examiner respectfully asserts that the cited prior arts have support and teach or suggest the subject matter “determining whether a security rule is associated with a SOAP message, wherein the security rule is associated with a security policy for exchanging messages between a client program and a server program”, “a security rule that describes a mapping between one or more keys respectively used by a client and a server program” and “mapping one or more security identifiers which are recognized by a client program to one or more security identifiers which are recognized by the server program” broadly recited in the amended independent claims 1, 16, 27, 33, 38, 39, 52, 53, 56, 65, 66 and 68. The dependent claims 2 – 15, 17 – 22, 24 – 26, 28 – 32, 34 – 27, 40 – 51, 54, 55, 57 – 64, 67 and 68 are rejected at least by virtue of their dependency on the dependent claims and by other

reason set forth in this office action. Accordingly, the rejection for the pending claims 1 – 68 is respectfully maintained.

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1 – 3, 5, 15, 23 – 68 are rejected under 35 U.S.C. 102(e) as being anticipated by Atwal et al. (U.S. Publication Number 2003/0061404).
  
8. Regarding Claims 1 and 23, Atwal teaches and describes receiving a SOAP message (Page 4 paragraph [0052]); determining whether at least one security rule is associated with the SOAP message, the at least one security rule being associated with a security policy for SOAP messages which can be exchanged between at least one client program and at least one server program, and performing at least one operation based on the at least one security rule when the determining determines that at least one security rule is associated with the SOAP message (Page 4 paragraph [0052 – 0055]).

9. Regarding Claims 27, 38, 56 and 65, Atwal teaches and describes receiving a SOAP message, determining whether at least one rule is associated with the SOAP message (Page 4 paragraph [0052]); collecting data that may be required to evaluate the at least one rule (Page 4 paragraph [0052 and 0055]); evaluating the at least one rule at least partially based on the collected data, and determining whether the SOAP message constitutes a service attack based on the evaluating of the at least one rule (Page 5 paragraph [0055] and Page 8 paragraph [0095 – 0096]).

10. Regarding Claims 33 and 66, Atwal teaches and describes receiving a SOAP message, determining at least one of: (a) a message type for the SOAP message, (b) a sender for the SOAP message, and (c) a recipient for the SOAP message (Page 4 paragraph [0052]), determining whether at least one rule is associated with at least one of the message type (a) , the sender (b), and the recipient (c) (Page 4 paragraph [0052]), selecting at least one portion of the data which has been collected for at least one of the message type (a) , the sender (b), and the recipient (c) (Page 4 paragraph [0052]); evaluating the at least one rule using the selected at least one portion of data (Page 4 paragraph [0052 and 0055]); and

determining whether the SOAP message constitutes a service attack based on the evaluating of the at least one rule (Page 5 paragraph [0055] and Page 8 paragraph [0095 – 0096]).

**11.** Regarding Claims 39 and 52 , Atwal teaches and describes identifying a SOAP interface for which publication or access is requested (Page 10 paragraph [0109]),

determining whether one or more rules are associated with the SOAP interface, the one or more rules describing one or more policies with respect to publication of or access to the SOAP interface (Page 10 paragraph [0111]),

evaluating the SOAP interface, and determining whether publication of or access to the SOAP interface should be granted based on the evaluating of the SOAP interface (Page 10 paragraph [0111]).

**12.** Regarding Claim 53 , Atwal teaches and describes

(a) identifying a SOAP interface and a WSDL file for the SOAP interface for which publication or access is requested, wherein the identifying can be performed by a first person by accessing a user interface of a SOAP traffic manager (Page 10 paragraph [0109 and 0111]),

(b) determining whether one or more rules already apply to the SOAP message, the one or more rules describing one or more policies with respect to publication of or access to the SOAP interface; wherein the determining (b) can be performed by the first

person by accessing a user interface to a SOAP traffic manager (Page 10 paragraph [0111]),

(c) requesting approval of one or more additional rules for the SOAP message wherein the requesting can be performed by the first person by accessing a user interface to a SOAP traffic manager (Page 10 paragraph [0111]),

(d) evaluating the SOAP interface or at least one rule associated with the SOAP interface, wherein the evaluating can be performed at least partly by a second person who can access the SOAP traffic manager, and wherein the at least one rule can be a pre-existing rule or an additional rule (Page 10 paragraph [0112]), and

(e) determining whether the SOAP interface or at least one rule associated with the SOAP interface should be approved at least partly based on the evaluating, wherein the determining can be performed at least partly by a second person who can access the SOAP traffic manager (Page 10 paragraph [0111 and 0114]).

**13.** Claims 2 and 24 are rejected as applied about in rejecting Claims 1 and 23. Furthermore, Atwal teaches and describes wherein the at least one security rule describes a mapping between one or more keys respectively used by the at least one client program and the at least one server program (Page 4 paragraph [0050 and 0053].

**14.** Claims 3 and 25 are rejected as applied about in rejecting Claims 1 and 23. Furthermore, Atwal teaches and describes wherein the performing of at least one

operation maps one or more security identifiers which are recognized by the at least one client program to one or more security identifiers which are recognized by the server program (Page 4 paragraph [0052] and Page 8 paragraph [0097]).

15. Claim 5 is rejected as applied about in rejecting Claim 1. Furthermore, Atwal teaches and describes wherein the method further comprises:

determining a message type for the SOAP message, and wherein the determining of whether at least one security rule is associated with the SOAP message comprises: looking up rules which are associated with the message type (Page 4 paragraph [0053] and Page 5 paragraph [0057 and 0059]).

16. Claim 15 is rejected as applied about in rejecting Claim 1. Furthermore, Atwal teaches and describes wherein at least one portion of the SOAP message is in XML (Page 3 paragraph [0048]).

17. Claims 22, 37, 51 and 64 are rejected as applied about in rejecting Claims 1, 27, 39 and 56. Furthermore, Atwal teaches and describes a computer readable medium having computer program instructions stored therein for performing the method of claim 1 (Page 2 paragraph [0017] and Page 14 paragraph [0155]).

18. Claims 28 and 58 are rejected as applied about in rejecting Claims 27 and 56. Furthermore, Atwal teaches and describes wherein the determining of whether at least

one rule is associated with the SOAP message comprises at least one of the acts of: (a) determining a message type for the SOAP message, (b) determining a sender node for the SOAP message, and (c) determining a recipient node for the SOAP message (Page 10 paragraph [0110 and 0111]).

**19.** Claims 30 and 34 are rejected as applied about in rejecting Claim 27.

Furthermore, Atwal teaches and describes wherein the method further comprises: denying service when the determining determines that the SOAP message constitutes a service attack (Page 7 paragraph [0084 and 0085] and Page 12 paragraph [0128]).

**20.** Claim 35 is rejected as applied about in rejecting Claim 33. Furthermore, Atwal teaches and describes taking remedial action when the determining determines that the SOAP message constitutes a service attack (Page 7 paragraph [0084 and 0085] and Page 12 paragraph [0128]).

**21.** Claim 40 is rejected as applied about in rejecting Claim 39. Furthermore, Atwal teaches and describes wherein the method further comprises: identifying a WSDL file for the SOAP interface (Page 8 paragraph [0089 and 0091]).

**22.** Claim 57 is rejected as applied about in rejecting Claim 56. Furthermore, Atwal teaches and describes herein the method further comprises: determining whether at least a portion of data of the SOAP message should

be considered to evaluate the at least one rule when the determining determines that at least one rule is associated with the SOAP message (Page 8 paragraph [0089 and 0091]).

**23.** Claim 59 is rejected as applied about in rejecting Claim 56. Furthermore, Atwal teaches and describes wherein the at least one rule specifies at least a portion of the SOAP message which needs to be considered to evaluate the at least one rule (Page 8 paragraph [0089 and 0091]).

**24.** Claims 61 and 67 are rejected as applied about in rejecting Claims 56 and 66. Furthermore, Atwal teaches and describes wherein the method further comprises: taking one or more actions when the determining of whether an action is required determines that action is required (Page 8 paragraph [0089 and 0091]).

**25.** Claims 62 and 68 are rejected as applied about in rejecting Claims 56 and 66. Furthermore, Atwal teaches and describes wherein the method further comprises: taking one or more actions when the determining of whether an action is required determines that action is required, and wherein the one or more actions include holding the SOAP message, archiving the SOAP message, failing SOAP message delivery, sending a notification, and logging special notification (Page 8 paragraph [0089 and 0091] and Page 10 paragraph [0107 and 0111]).

26. Claim 45 is rejected as applied about in rejecting Claim 39. Furthermore, Atwal teaches and describes wherein the evaluating of the SOAP interface is done at least partly based on one or more rules associated with the SOAP interface (Page 6 paragraph [0068 and 0069]).

27. Claim 54 is rejected as applied about in rejecting Claim 39. Furthermore, Atwal teaches and describes wherein the first person is a programmer and the second person is an administrator (Page 7 paragraph [0085]).

28. Claim 55 is rejected as applied about in rejecting Claim 39. Furthermore, Atwal teaches and describes wherein the method further comprises:

modifying the SOAP interface or one or more additional rules for the SOAP interface, wherein the modifying can be performed at least partly by a second person who can access the SOAP traffic manager (Page 7 paragraph [0085] and Page 13 paragraph [0140]).

29. Claim 29 is rejected as applied about in rejecting Claim 27. Furthermore, Atwal teaches and describes wherein the determining of data that may be required to evaluate the at least one rule comprises:

determining which portion of history of at least one of the message type, sender node, and recipient node should be collected (Page 10 paragraph [0109 and 0111]).

30. Claim 41 is rejected as applied about in rejecting Claim 40. Furthermore, Atwal teaches and describes wherein a programmer identifies the SOAP interface and the WSDL file (Page 7 paragraph [0082 and 0111]).

31. Claim 46 is rejected as applied about in rejecting Claim 45. Furthermore, Atwal teaches and describes wherein the evaluating of the SOAP interface is done at least partly by a person (Page 7 paragraph [0085]).

32. Claim 42 is rejected as applied about in rejecting Claim 41. Furthermore, Atwal teaches and describes wherein the programmer interacts with a user interface to identify the SOAP interface and the WSDL file (Page 7 paragraph [0082 and 0111]).

33. Claim 47 is rejected as applied about in rejecting Claim 46. Furthermore, Atwal teaches and describes wherein the person is an administrator (Page 7 paragraph [0085]).

34. Claim 43 is rejected as applied about in rejecting Claim 42. Furthermore, Atwal teaches and describes wherein the programmer interacts with a user interface of a traffic manager to determine whether one or more existing rules are associated with the SOAP interface; and wherein the programmer interacts with a user interface of a traffic manager to request that one or more rules be approved for the SOAP interface (Page 7 paragraph [0082 and 0111]).

35. Claim 44 is rejected as applied about in rejecting Claim 42. Furthermore, Atwal teaches and describes wherein the one or more rules associated with the SOAP interface can be rules associated with at least one of: a message type, a sender, or a recipient of SOAP messages that can be passed through the SOAP interface (Page 5 paragraph [0062]).

36. Claim 48 is rejected as applied about in rejecting Claim 47. Furthermore, Atwal teaches and describes wherein the modifying the SOAP interface (Page 7 paragraph [0085] and Page 13 paragraph [0140]).

37. Claim 49 is rejected as applied about in rejecting Claim 48. Furthermore, Atwal teaches and describes wherein the modifying is performed at least partly by a person (Page 7 paragraph [0085] and Page 13 paragraph [0140]).

38. Claim 50 is rejected as applied about in rejecting Claim 49. Furthermore, Atwal teaches and describes wherein the person is an administrator (Page 7 paragraph [0085]).

39. Claim 31 is rejected as applied about in rejecting Claim 30. Furthermore, Atwal teaches and describes wherein the method further comprises:  
taking remedial action when the determining determines that the SOAP

message constitutes a service attack (Page 7 paragraph [0084 and 0085] and Page 12 paragraph [0128]).

**40.** Claim 32 is rejected as applied about in rejecting Claim 30. Furthermore, Atwal teaches and describes wherein the one or more remedial actions include notifying an administrator, holding the SOAP message, making a log entry, invoking a programming object, and sending an additional SOAP message (Page 8 paragraph [0089 and 0091] and Page 10 paragraph [0107 and 0111]).

**41.** Claim 60 is rejected as applied about in rejecting Claim 59. Furthermore, Atwal teaches and describes wherein the method further comprises: gathering at least one portion of the SOAP message (Page 3 paragraph [0048]).

**42.** Claim 63 is rejected as applied about in rejecting Claim 63. Furthermore, Atwal teaches and describes wherein the SOAP message is held for review by a person (Page 10 paragraph 0111).

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

43. Claims 4, 6 – 14, 16 – 21, 26 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atwal et al. (U.S. Publication Number 2003/0061404, hereafter "Atwal") in view of Della-Libera et al. (U.S. Publication Number 2003/0074579, hereafter "Della").

44. Regarding Claim 16, Atwal discloses:

receiving a SOAP message (Atwal Page 4 paragraph [0052]).

determining whether at least one decryption rule is associated with the SOAP message attempting to decrypt the SOAP message using one or more keys associated with the at least one decryption rule when the determining determines that at least one decryption rule is associated with the SOAP message (Atwal Page 4 paragraph [0052] and Page 8 paragraph [0093]). Atwal does not explicitly disclose determining encryption/decryption rule associated with the SOAP message, verifying at least one signature associated with the SOAP message or signing SOAP message using one or more keys associated with the at least one signing rule.

However, Della discloses delegating security credentials in a distributed security system wherein security credentials may be passed between components or services using the SOAP, wherein

determining whether at least one decryption rule is associated with the SOAP message attempting to decrypt the SOAP message using one or more keys associated with the at least one decryption rule when the determining determines that at least

one decryption rule is associated with the SOAP message (Della Page 5 paragraph [0051 - 0053])

determining whether at least one encryption rule is associated with the SOAP message encrypting the SOAP message using one or more keys associated with the at least one decryption rule when the determining determines that at least one encryption rule is associated with the SOAP message (Della Page 5 paragraph [0051 - 0054])

determining whether at least one signature verification rule is associated with the SOAP message, verifying at least one signature associated with the SOAP message per requirements specified by the at least one signature verification rule when the determining determines that at least one signature verification rule is associated with the SOAP message (Della Page 5 paragraph [0051 and 0055])

determining whether at least one signing rule is associated with the SOAP message, and signing the SOAP message using one or more keys associated with the at least one signing rule (Della Page 5 paragraph [0051 - 0053] and Page 6 paragraph [0058 and 0059]).

**45.** Motivation to combine the invention of Della with Atwal's teachings comes from the need for securing the transaction sent over computer networks by various clients. Atwal provides a discussion of the needed security but silent as to the specific details of the technical cryptography involved, (See Atwal Page 8 paragraph [0093]). It would be obvious to one of ordinary skill in the art to combine Della with Atwal because security through using encryption, decryption and digital signature security and confidentiality of

SOAP messages may be achieved and Della provides the details of how to secure SOAP messages (See Della Page 5 paragraph [0051 – 0056] and Page 6 paragraph [0058 and 0059]).

**46.** Claims 4 and 26 are rejected as applied about in rejecting Claims 3 and 23.

Furthermore, Atwal does not discloses the security identifiers can include one or more encryption keys, one or more decryption keys, one or more signing keys, and one or more keys used to verify one or more signatures.

However, Della discloses delegating security credentials in a distributed security system wherein security credentials may be passed between components or services using the SOAP, wherein the security identifiers can include one or more encryption keys, one or more decryption keys, one or more signing keys, and one or more keys used to verify one or more signatures (Della Page 5 paragraph [0051 - 0054]).

**47.** Motivation to combine the invention of Della with Atwal's teachings comes from the need for securing the transaction sent over computer networks by various clients. Atwal provides a discussion of the needed security but silent as to the specific details of the technical cryptography involved, (See Atwal Page 8 paragraph [0093]). It would be obvious to one of ordinary skill in the art to combine Della with Atwal because security through using encryption, decryption and digital signature security and confidentiality of SOAP messages may be achieved and Della provides the details of how to secure

SOAP messages (See Della Page 5 paragraph [0051 – 0056] and Page 6 paragraph [0058 and 0059]).

**48.** Claim 6 is rejected as applied about in rejecting Claim 1. Furthermore, Atwal does not disclose the at least one security rule includes at least one decryption rule, and wherein the performing of the at least one operation comprises: determining whether the SOAP message is encrypted, and decrypting the SOAP message based on one or more decryption keys which are associated with the at least one decryption rule.

However, Della discloses delegating security credentials in a distributed security system wherein security credentials may be passed between components or services using the SOAP, wherein the at least one security rule includes at least one decryption rule, and wherein the performing of the at least one operation comprises: determining whether the SOAP message is encrypted, and decrypting the SOAP message based on one or more decryption keys which are associated with the at least one decryption rule (Della Page 5 paragraph [0051 - 0054]).

**49.** Motivation to combine the invention of Della with Atwal's teachings comes from the need for securing the transaction sent over computer networks by various clients. Atwal provides a discussion of the needed security but silent as to the specific details of the technical cryptography involved, (See Atwal Page 8 paragraph [0093]). It would be obvious to one of ordinary skill in the art to combine Della with Atwal because security through using encryption, decryption and digital signature security and confidentiality of

SOAP messages may be achieved and Della provides the details of how to secure SOAP messages (See Della Page 5 paragraph [0051 – 0056] and Page 6 paragraph [0058 and 0059]).

**50.** Claim 8 is rejected as applied about in rejecting Claim 1. Furthermore, Atwal do not discloses the at least one security rule includes at least one encryption rule, and wherein the performing of at least one operation comprises: encrypting the SOAP message based on one or more encryption keys which are associated with the at least one encryption rule.

However, Della discloses delegating security credentials in a distributed security system wherein security credentials may be passed between components or services using the SOAP, wherein the at least one security rule includes at least one encryption rule, and wherein the performing of at least one operation comprises: encrypting the SOAP message based on one or more encryption keys which are associated with the at least one encryption rule (Della Page 5 paragraph [0051 - 0054]).

**51.** Motivation to combine the invention of Della with Atwal's teachings comes from the need for securing the transaction sent over computer networks by various clients. Atwal provides a discussion of the needed security but silent as to the specific details of the technical cryptography involved, (See Atwal Page 8 paragraph [0093]). It would be obvious to one of ordinary skill in the art to combine Della with Atwal because security through using encryption, decryption and digital signature security and confidentiality of

SOAP messages may be achieved and Della provides the details of how to secure SOAP messages (See Della Page 5 paragraph [0051 – 0056] and Page 6 paragraph [0058 and 0059]).

**52.** Claim 12 is rejected as applied about in rejecting Claim 1. Furthermore, Atwal do not discloses the at least one security rule includes at least one signature verification rule, and wherein the performing of at least one operation comprises: verifying at least one signature associated with the SOAP message per requirements specified by the at least one signature verification rule.

However, Della discloses delegating security credentials in a distributed security system wherein security credentials may be passed between components or services using the SOAP, wherein the at least one security rule includes at least one signature verification rule, and wherein the performing of at least one operation comprises: verifying at least one signature associated with the SOAP message per requirements specified by the at least one signature verification rule (Della Page 5 paragraph [0051 - 0054]).

**53.** Motivation to combine the invention of Della with Atwal's teachings comes from the need for securing the transaction sent over computer networks by various clients. Atwal provides a discussion of the needed security but silent as to the specific details of the technical cryptography involved, (See Atwal Page 8 paragraph [0093]). It would be obvious to one of ordinary skill in the art to combine Della with Atwal because security

through using encryption, decryption and digital signature security and confidentiality of SOAP messages may be achieved and Della provides the details of how to secure SOAP messages (See Della Page 5 paragraph [0051 – 0056] and Page 6 paragraph [0058 and 0059]).

**54.** Claim 14 is rejected as applied about in rejecting Claim 1. Furthermore, Atwal do not discloses the at least one security rule includes a signing rule; and wherein the performing of at least one operation comprises: signing the SOAP message using one or more keys which are associated with the at least one security rule.

However, Della discloses delegating security credentials in a distributed security system wherein security credentials may be passed between components or services using the SOAP, wherein the at least one security rule includes a signing rule; and wherein the performing of at least one operation comprises: signing the SOAP message using one or more keys which are associated with the at least one security rule (Della Page 5 paragraph [0051 - 0054]).

**55.** Motivation to combine the invention of Della with Atwal's teachings comes from the need for securing the transaction sent over computer networks by various clients. Atwal provides a discussion of the needed security but silent as to the specific details of the technical cryptography involved, (See Atwal Page 8 paragraph [0093]). It would be obvious to one of ordinary skill in the art to combine Della with Atwal because security through using encryption, decryption and digital signature security and confidentiality of

SOAP messages may be achieved and Della provides the details of how to secure SOAP messages (See Della Page 5 paragraph [0051 – 0056] and Page 6 paragraph [0058 and 0059]).

**56.** Claim 17 is rejected as applied about in rejecting Claim 16. Furthermore, Atwal discloses a computer readable medium having computer program instructions stored therein for performing the method of claim 1 (Atwal Page 2 paragraph [0017] and Page 14 paragraph [0155]).

**57.** Claim 18 is rejected as applied about in rejecting Claim 16. Furthermore, Atwal discloses determining a message type for the SOAP message, and looking up rules which are associated with the message type (Atwal Page 4 paragraph [0053] and Page 5 paragraph [0057 and 0059]).

**58.** Claim 19 is rejected as applied about in rejecting Claim 16. Furthermore, Atwal discloses wherein at least one portion of the SOAP message is in XML (Atwal Page 3 paragraph [0048]).

**59.** Claim 20 is rejected as applied about in rejecting Claim 16. Furthermore, Della discloses wherein the method further comprises: determining whether the SOAP message is encrypted before attempting to decrypt the SOAP message; determining whether the SOAP message has been encrypted successfully;

and taking appropriate action when the determining determines that the SOAP message has not been encrypted successfully (Della Page 5 paragraph [0052 and 0053]).

**60.** Claim 7 is rejected as applied about in rejecting Claim 6. Furthermore, Della discloses the one or more decryption keys are managed by an organization or define an organization role (Della Page 2 paragraph [0029] and Page 3 paragraph [0035 and 0037]).

**61.** Claim 11 is rejected as applied about in rejecting Claim 6. Furthermore, Della discloses determining whether the SOAP message is encrypted successfully; and taking appropriate action when the determining determines that the SOAP message has not been encrypted successfully (Della Page 5 paragraph [0052 and 0053]).

**62.** Claim 9 is rejected as applied about in rejecting Claim 8. Furthermore, Della discloses wherein the one or more encryption keys are associated with an individual (Della Page 5 paragraph [0051 – 0054]).

**63.** Claim 10 is rejected as applied about in rejecting Claim 8. Furthermore, Della discloses determining whether the SOAP message is encrypted before attempting to decrypt the SOAP message (Della Page 5 paragraph [0051 – 0055]).

**64.** Claims 13 and 21 are rejected as applied about in rejecting Claims 12 and 16. Furthermore, Atwal do not discloses the method further comprises: determining whether the at least one signature associated with the SOAP message has successfully been verified, and taking appropriate action when the determining determines that one or more of the at least one signature has not been successfully verified.

However, Della discloses delegating security credentials in a distributed security system wherein security credentials may be passed between components or services using the SOAP, wherein the method further comprises: determining whether the at least one signature associated with the SOAP message has successfully been verified, and taking appropriate action when the determining determines that one or more of the at least one signature has not been successfully verified (Della Page 5 paragraph [0051 – 0054]).

**65.** Motivation to combine the invention of Della with Atwal's teachings comes from the need for securing the transaction sent over computer networks by various clients. Atwal provides a discussion of the needed security but silent as to the specific details of the technical cryptography involved, (See Atwal Page 8 paragraph [0093]). It would be obvious to one of ordinary skill in the art to combine Della with Atwal because security through using encryption, decryption and digital signature security and confidentiality of SOAP messages may be achieved and Della provides the details of how to secure SOAP messages (See Della Page 5 paragraph [0051 – 0056] and Page 6 paragraph [0058 and 0059]).

66. Claim 36 is rejected as applied about in rejecting Claim 7. Furthermore, Atwal discloses wherein the remedial action includes notifying an administrator, holding the SOAP message, making a log entry, invoking a programming object, and sending an additional SOAP message (Page 7 paragraph [0084 and 0085] and Page 12 paragraph [0128]).

***Conclusion***

67. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**68.** Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

**69.** The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO Form 892.

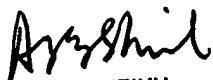
Applicant is urged to consider the references. However, the references should be evaluated by what they suggest to one versed in the art, rather than by their specific disclosure. If applicants are aware of any better prior art than those are cited, they are required to bring the prior art to the attention of the examiner.

**70.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pramila Parthasarathy whose telephone number is 571-272-3866. The examiner can normally be reached on 8:00a.m. To 5:00p.m.. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-232-3795. Any inquiry of a general nature or relating to

the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR only. For more information about the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pramila Parthasarathy  
October 03, 2005.

  
AYAZ SHEIKH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100